

EASINGTON RURAL SANITARY AUTHORITY.

REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

FOR THE YEAR ENDING DECEMBER 31, 1893.

Wingate,
February, 1894.

GENTLEMEN,

I beg to submit to you my report of Sanitary work, and Vital Statistics for the year ending 31st December, 1893.

During the year 923 deaths occurred and 1673 births were registered.

The death-rate was 22.45 per thousand of population, against 20.41 the average death-rate for the previous thirteen years.

The birth-rate was 40.70 per thousand of population, against 40.99 the average of the previous thirteen years.

The death-rate is 55.16 per cent. of the birth-rate, against 50.71 the average of the previous thirteen years.

The number of deaths under five years of age was 504, being 54.60 per cent. of the total deaths, against 52.20 the average of the previous thirteen years.

The number of deaths under one year to 1000 births, was 185. against 160. the average for the previous twelve years.

13 deaths were of persons over 80 years of age, 8 males with an average of 83.2 years, and 5 females with an average of 81.8 years.

181 deaths occurred in the first quarter, 212 in the second, 297 in the third, and 233 in the fourth.

Of the 56 deaths at Easington 29 were at the Workhouse, 3 infants, 1 Rheumatic Fever, 1 young imbecile, 5 phthisis, and the rest from diseases incident to old age.

The deaths from the principal zymotic diseases were 3.16 per thousand of population, against 2.43 the average for the previous twelve years. They were :

| | Under 5. | | Over 5. | | Total. | |
|-----------------------|----------|-----|---------|-----|--------|-----|
| Smallpox | — | ... | 1 | ... | 1 | 1 |
| Measles | 22 | ... | — | ... | 22 | 22 |
| Whooping Cough | 6 | ... | — | ... | 6 | 6 |
| Scarlatina | 20 | ... | 7 | ... | 27 | 27 |
| Diphtheria | 10 | ... | 5 | ... | 15 | 15 |
| Croup | 5 | ... | — | ... | 5 | 5 |
| Typhus Fever | — | ... | 5 | ... | 5 | 5 |
| Enteric Fever | 5 | ... | 37 | ... | 42 | 42 |
| Continued Fever | 6 | ... | 1 | ... | 7 | 7 |
| | — | | — | | — | — |
| | 74 | | 56 | | 130 | 130 |
| | — | | — | | — | — |

SMALLPOX.—This disease first appeared in January in a tramp in the casual ward at the Workhouse, who came from South Shields where it existed. A week later another tramp in the casual ward, also from South Shields, showed the disease. At the same time another tramp, also in the casual ward, from whom no information could be got as to where he came from, also showed the disease. Through the agency of the County Medical Officer I got to know that a woman discovered to be suffering from Smallpox at Willington, had, a few days before, lodged for one night in a house at Thornley. This house was carefully watched, with the result that a case of Smallpox was discovered in that house ten days afterwards. In February a case was found at Haswell, in a man who had been a few days in Sunderland. All these cases were quickly removed to the Infectious Hospital, with the result that there was not any spread whatever. In November, a boy at Castle Eden, who had previously been seen in the company of tramps, took the disease in a severe form and died. He was the only one of the family who had not been vaccinated. There was no accommodation for him in the Hospital, but the utmost precautions in the shape of isolation and disinfection were observed. This is the total incidence of the disease in the district.

MEASLES.—This disease, from which the district had been free since August, 1892, appeared at Seaham in January, but in a mild form, and to a limited extent; it next appeared at Murton, in the last quarter, from where it spread to Haswell. The cases were numerous and the disease severe, as may be seen from the high death-rate. The district seems to be free at

present, though it may appear in a fresh quarter at any moment.

WHOOPING COUGH.—This disease has not been epidemic during the year, although a few deaths of young children have been noted in Wingate only.

SCARLATINA.—This first appeared at Seaham in January, where it at first became epidemic, and lasted more or less throughout the whole year. At Wingate it appeared in April, imported directly from Trimdon; it became markedly epidemic for three months, and odd cases kept it in existence for the rest of the year. It existed to a similar extent in Hesleden;—over a hundred cases. In May it appeared at Shotton. In November it showed itself at the Workhouse to the extent of nine cases, which were removed to the Infectious Hospital. The nature of the disease varied considerably; thus, at Seaham the case mortality was one per cent.; in Hesleden it was two; in Shotton it was ten; and in Wingate thirteen per cent. This shows an inexplicable difference in the severity of the disease at different places, or else throws doubt in the diagnosis.

DIPHTHERIA.—At the end of 1892 a severe throat affection bearing this name was very prevalent in Wingate, and was then considered. In the beginning of 1893 it still existed. Of 15 deaths from this 11 are referred to Wingate. Six of these occurred in the second quarter, when Scarlatina also obtained in a very severe form. Both diseases were often notified as occurring in the same house, sometimes in the same person. The presumption is therefore strong that

many alleged cases of Diphtheria were really severe cases of Scarlatina.

MEMBRANOUS CROUP.—Nine cases of this were notified, with five deaths. In six of the cases there were no close drains in connexion with the house, but the scavenging had been neglected and the surroundings were filthy.

TYPHUS FEVER.—This disease which is not common, appeared to a greater extent than I have ever known it. At Seaham it appeared in September—imported from Southwick. There were eight cases living mostly near together; they were all removed to the infectious hospital. Six of them recovered. At Wingate, in September, a case appeared imported from Stockton, and another soon afterwards living close to. Both were removed to the infectious hospital. At Hesleden, in September, two other cases, and in November one case appeared; which was removed to hospital. I could not discover the origin of these cases. At Haswell one case occurred due to personal habits and surroundings, I got to know of no other cases, though I have no doubt there were more, and that they were mistaken for Enteric Fever, as many of the above were reported as Enteric Fever in the first instance.

ENTERIC FEVER.—The year has been marked by an unparalleled exuberance of this disease, to the extent of 332 cases, with a case mortality of 12 per cent. With one exception it appeared in every locality in the district, most notably at Seaham and Hesleden. The number of cases per thousand of population varying from 0.6 to 25.7. The prevalence of this dis-

ease, along with Typhus and Continued Fever, was the subject of a special report to you of its extent up to 30th November. In that report I described in detail the condition of each locality with reference to drinking water, drainage, refuse, and excrement removal. With the drinking water generally no approach to a suspicion could be detected. In all the populous centres it is pumped from the limestone at a depth of several hundred feet. As usual with infectious diseases, its incidence was most extensive, and most severe where the houses had enclosed yards attached.

The milk supply was thoroughly enquired into, with negative results. Indeed, the use of milk is limited in this district to that used with tea. It is never used by itself by adults, unless when specially ordered in sickness. Even children on the bottle are invariably fed with condensed milk. It is worthy of note that the fever was exclusively limited to colliery villages.

This disease was at the same time equally prevalent in the districts surrounding this, and as special enquiry has been directed to this subject, I refrain from further speculation or remarks.

CONTINUED FEVER.—This disease existed at the same time and places as the foregoing, to the extent of 78 cases. It was less fatal than Enteric Fever, and generally much milder and of shorter duration. Under the circumstances, this calls for no further remark.

DIARRHŒA.—This affection was prevalent throughout the district during the warm weather, to an extent beyond previous experience. The deaths

from this were 8.12 per cent. of the total deaths, against 3.92 the average of the previous ten years. Nor were they as in previous years almost limited to young children, but embraced many adults. This prevalence is to be noted along with that of Enteric Fever. Probably both are due to the development in the soil, by the unusually hot and dry summer, of germs, which in a summer of ordinary experience should have lain dormant.

PUERPERAL FEVER.—There were 11 deaths from this, a much larger number than usual; they occurred throughout the district generally, but much the greater proportion at Seaham. I did not trace any specific connection between any of them.

The death-rate from Phthisis was 1.31 per thousand of population, and from respiratory diseases 2.94; both of these are much below the rates of previous years.

For the prevention of infectious diseases the following action has been taken. The Notification of Infectious Diseases Act has been in force since the beginning of the year. Large bills were posted giving instructions as to precautions against contagion, and small bills were distributed to every house in the district. In the more important cases disinfection of rooms was performed by your inspector, articles being burned when advisable and compensation made. Disinfectants were freely distributed gratuitously. The infectious hospital has been kept in readiness, and been of much service. There were received and treated 5 cases of Smallpox, 11 of Typhus, 6 of Enteric Fever, and 9 of Scarlet Fever.

In October, I made for you a special report on the hospital, in consequence of which your authority is now arranging for an enlargement of the building.

House-to-house visitation was often made, to enquire into conditions contributing to infection. Greater vigilance was observed as to efficiency in scavenging, and more frequency in the cleansing of ashpits and privies. When practicable the taps were turned on to flush the sewers in dry weather.

Sanitary Work Executed.—Under the advice of your sanitary inspector and myself, the following work has been done during the year.

Haswell.—For the Colliery Cottages, 200 yards of 6-inch sewers, and an additional 100 yards of 9-inch sewers, to carry it to the main drainage. Haswell Lane.—400 yards of 9-inch sewers, for the length of this. Attached to this is a settling tank for purification. Johnson Place, 100 yards of 6-inch sewers, also with settling tank attached.

Shotton Colliery.—150 yards of 6-inch sewers for a short street, hitherto supplied with open channels. 300 yards of 9-inch pipes, making a system with the 150 yards and 250 yards laid down the previous year. A settling tank is also attached.

Wingate.—300 yards of 9-inch pipes forming a drainage for the schools, and all the buildings in the same row; 100 yards of 6-inch pipes, a much needed improvement behind Seymour Street.

Station Town.—150 yards of 9-inch pipes, draining East View, and entering the general system.

Castle Eden Colliery.—200 yards of 9-inch pipes to take the sewage from the open channels

at the lower end of the rows. 55 yards of 21-inch pipes, to collect the whole system, and remove it clear out of the village.

South Hetton.—450 yards of 9-inch pipes to receive contents of front street close drain and the whole of the open channels. To this two settling tanks are attached before it enters the stream.

Easington.—160 yards of 9-inch pipes to continue the whole system of the village, and one settling tank.

All these tanks are 40 feet in length, 20 feet in width, and 3 feet deep. They are constructed of brick and cement, divided into four compartments, and wholly used for the cleansing of the sewage in the sewers to which they are attached.

Three special settling tanks have been constructed on the main sewage system as it leaves Haswell to enter the Durham district.

Complaint was made by the Durham Rural Authority that sewage from Haswell polluted their stream at Ludworth. Careful enquiry into this matter was made by the County Medical Officer and your inspector on the spot, but their examination failed to discover any pollution.

Ashpit and Privy Accommodation.—As the result of the active movements in the previous year, ashpit and privy accommodation has been provided throughout the district for houses, viz. :

Haswell Colliery houses, 250; Haswell Lane, private property, 30 houses; Johnson Place, private property, 50 houses; Plough Cottages, for colliery workmen, 140 houses; Haswell Moor Colliery cottages,

110; Shotton Colliery, 40 houses; Wingate Colliery property, 328 houses; South Hetton, 46 houses; Thornley Colliery houses, 100. For South Hetton, plans have been passed for accommodation to eight rows and 50 other houses, but not yet erected.

These structures are not uniform, but of various designs; some are covered and some open. I shall therefore have an opportunity of observing the advantages or otherwise of the different varieties. In the past I have always noted that the uncovered ashpit, although contrary to regulation, gives the least offence as a stink nuisance.

At Murton 100 houses have been re-spouted and have had the open channels attached to them reconstructed. The owners of Murton Street have had notices served to provide privy accommodation, and improve the sewerage, but this is not yet complied with.

New property.—20 houses have been built at Wingate, 30 at Station Town, and 8 at deaf Hill. These were all built from plans approved by your authority, and in conformity with the bye-laws.

Water Supply.—In September I submitted to you a special report on the great deficiency of water at Trimdon Foundry. This has since been remedied by an extension for three-quarters of a mile of the Trimdon Grange supply. The number of street hydrants has been increased, and the supply is now satisfactory.

At Castle Eden Colliery the usual supply was totally suspended in November by the sudden stoppage of the colliery. This was also the subject of a special report. Water is now being carted into the village in

barrels ; some old wells have been re-opened, and your inspector has instructions to proceed at once to cleanse out the old wells, or construct a new one if necessary.

At South Hetton many people continue to use an unauthorised supply, though that provided for their use is abundant. To this, as on a former occasion, I attribute several cases of Enteric Fever.

Easington.—Since the wells of the village were condemned in 1892, the supply is still from a well half-a-mile distant. A deep boring was made with the view of procuring water on the spot, but this was unsuccessful. Another scheme is now in progress, to obtain a supply from the Sunderland and South Shields Water Company. Negotiations have been begun and a firm of engineers engaged to make the necessary surveys for mains and a reservoir.

Insanitary Property.—Closing orders have been obtained from the magistrates for 34 houses at Thornley ; 60 more are under notice, and will be proceeded against on the expiry of the notice if they do not comply. Three houses have also, after due notice, been closed by magistrates' order at Station Town.

The condition of South Wingate generally as to ashpit and privy accommodation and channelling is far from satisfactory. The owners of the property have been communicated with, but have not yet decided what steps they will take, pending which active measures have lain in abeyance.

During the year I have laid before you eight special reports, viz.—April: insanitary property at Thornley ; June: insanitary houses at Hutton Henry ; August: insanitary property at Thornley

(second lot); August: sanitary condition of South Hetton; September: water supply at Trimdon; October: efficiency of Infectious Hospital; November: Castle Eden Colliery water supply; November: prevalence of Fever throughout the district; all of which engaged your attention, with the desired results, as before noted.

Your Inspector has served 60 statutory notices for foul ashpits, sinks, and pig-sties. 160 verbal notices for other nuisances have also been given.

Butcher Shops and Slaughter-houses.—There are 48 of these, and they have been regularly visited. They are kept clean and in good condition, the refuse is removed once a week. No case of diseased meat has been found, either in these or in the case of those coming from outside the district.

Common Lodging Houses.—There are three of these, registered and located at Easington. As these are occupied solely by tramps, much care has been devoted to visiting them, noting whether cleanliness has been observed and that limewashing is regularly performed. No case of an infectious disease has been found in them during the year.

Cowsheds and Dairies.—Three additions have been made to the register, making the number now 49. They are all kept in a fair state. The sheds have sufficient space, drainage, light, ventilation and water. In no case is the dairy connected with the dwelling-house.

On the appearance of Scarlet Fever at a farm from where milk was sent to Sunderland, the supply was stopped until recovery occurred and disinfection was performed.

I received notice of two persons entering the district from cholera-infected ports, and kept them under observation for a sufficient time.

It is satisfactory to observe that more work in the shape of improvement by drainage and ashpit and privy construction has been done in this than in any previous year on record.

Though the birth-rate is satisfactory the death-rate is too high by at least 2 per thousand. This obviously is due to the unusual increase of Fever and Diarrhœa in the end of the year.

The number of deaths under one year is also too high. This, to a certain extent, is owing to the high birth-rate.

For the correction of Table A, there were ten deaths in the Workhouse of persons belonging to Dawdon outside the district.

I have not been able to separate the cases of sickness on Table B, as the notifiers did not uniformly furnish me with the age.

The area of the district is 36,942 acres, and the population 41,099.

I am, Gentlemen,

Your obedient servant,

JAMES ARTHUR,

Medical Officer of Health.

THE SANITARY AUTHORITY,
EASINGTON.

(A)

TABLE OF DEATHS during the year 1893, in the RURAL Sanitary District of EASINGTON, classified according to DISEASES, AGES, and LOCALITIES.

| NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shown as separate localities. | Mortality from all Causes, at subjoined ages. | | | | | | | | Mortality from subjoined Causes, distinguishing Deaths of Children under Five Years of Age. | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---------------|---------------|----------------|-----------------|-----------------|----------------|----------------|---|------------|------------|------------------|--------|--------------------|-----------|-----------|-----------|----|---------|------------|---------|----------------|-------------------------|-----------------|------|----------|------------------------------------|---------------|----------|--------------------|-------|----|
| | At all ages. | Under 1 year. | 1 and under 5 | 5 and under 15 | 15 and under 25 | 25 and under 65 | 65 and upwards | | Smallpox | Scarlatina | Diphtheria | Membranous Group | Fevers | | | | | | Cholera | Erysipelas | Measles | Whooping Cough | Diarrhoea and Dysentery | Rheumatic Fever | Ague | Phthisis | Bronchitis, Pneumonia and Pleurisy | Heart Disease | Injuries | All other Diseases | TOTAL | |
| | | | | | | | | | | | | | Typhus | Enteric or Typhoid | Continued | Relapsing | Puerperal | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | | |
| Easington | 56 | 13 | | 1 | 4 | 23 | 15 | Under 5 upwds. | | | | | 4 | 2 | | | | | 1 | | | 2 | 1 | | | 5 | 3 | | | | 8 | 13 |
| Haswell | 138 | 39 | 37 | 7 | 12 | 27 | 16 | Under 5 upwds. | | 2 | 1 | 2 | | 1 | 4 | 1 | 2 | | | 10 | | 8 | | | | 2 | 11 | | 1 | 39 | 76 | |
| Shotton | 41 | 12 | 10 | 1 | 3 | 6 | 9 | Under 5 upwds. | | 3 | | 1 | | | | | 1 | | | | | 4 | | | | | 3 | | 1 | 10 | 22 | |
| Castle Eden, Hawthorn, Burdon, Cold Hesleden, Dalton-le-Dale..... | 33 | 9 | 3 | 1 | 2 | 9 | 9 | Under 5 upwds. | 1 | | | | | | | | | | | 1 | 2 | | | | 3 | 1 | | 1 | 7 | 12 | | |
| East Murton..... | 151 | 50 | 39 | 14 | 7 | 27 | 14 | Under 5 upwds. | | 1 | | | | 9 | | 2 | | | | 8 | 1 | 14 | | | 3 | 19 | | | | 39 | 89 | |
| Kelroe..... | 12 | 1 | 3 | | 1 | 5 | 2 | Under 5 upwds. | | | | | | 1 | | | 1 | | | | | 1 | 1 | | | | | | | 1 | 4 | |
| Thornley | 45 | 12 | 8 | 7 | 1 | 9 | 8 | Under 5 upwds. | | | 1 | | | | | | | | | 1 | 3 | | | | 2 | 5 | 4 | | 1 | 11 | 25 | |
| Wingate..... | 161 | 57 | 47 | 14 | 4 | 21 | 18 | Under 5 upwds. | | 9 | 8 | 2 | | 2 | | | 1 | 1 | 5 | 4 | | | | | 16 | | | | | 56 | 104 | |
| Monk Hesleden, Hutton Henry, Sheraton, Hulam, Nesbit..... | 153 | 69 | 22 | 12 | 11 | 29 | 10 | Under 5 upwds. | | 2 | 1 | | | 14 | 1 | | | | | | 12 | | | | 13 | | | | | 62 | 91 | |
| Seaham, Seaton, Slingley .. | 133 | 49 | 24 | 11 | 15 | 28 | 6 | Under 5 upwds. | | 3 | | | | 6 | 3 | | 1 | 4 | | 2 | 1 | 13 | | | 3 | 4 | 1 | | | 39 | 73 | |
| TOTALS..... | 923 | 311 | 193 | 68 | 60 | 184 | 107 | Under 5 upwds. | 1 | 7 | 5 | | 5 | 37 | 1 | 1 | 11 | | 3 | 22 | 6 | 63 | 1 | | 8 | 72 | 1 | 3 | 279 | 504 | | |

(B) TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1893, in the RURAL Sanitary District of Easington; classified according to DISEASES, AGES, and LOCALITIES.

| NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shown as separate localities. | Population at all Ages. | | Registered Births. | New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health. | | | | | | | | | | | | | Number of such Cases removed from their Homes in the several Localities for Treatment in Isolation Hospital. | | | | | | | | | | | | |
|--|-------------------------|------------------------------|--------------------|--|-------------|-------------|-------------------|---------|---------------------|-----------|-----------|-----------|----------|-------------|----|----|--|-------------|-------------|-------------------|---------|---------------------|-----------|-----------|-----------|----------|-------------|----|----|
| | Census 1891. | Estimated to middle of 1893. | | Smallpox. | Scarlatina. | Diphtheria. | Membranous Group. | Fevers. | | | | | Cholera. | Erysipelas. | | | Smallpox. | Scarlatina. | Diphtheria. | Membranous Group. | Fevers. | | | | | Cholera. | Erysipelas. | | |
| | | | | | | | | Typhus. | Enteric or Typhoid. | Continued | Relapsing | Puerperal | | | | | | | | | Typhus. | Enteric or Typhoid. | Continued | Relapsing | Puerperal | | | | |
| (a) | (b) | (c) | (d) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Workhouse | 147 | 173 | 7 | 3 | 9 | | | | 1 | | | | | 1 | | | 3 | 9 | | | | 1 | | | | | | | |
| Easington (H) | 1,115 | 1 462 | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Haswell..... | 6,276 | 6,799 | 251 | 1 | 23 | | 2 | 1 | 37 | 12 | | | | 12 | | | 1 | | | | | | | | | | | | |
| Shotton | 1,975 | 2,385 | 102 | | 30 | 2 | 1 | | 6 | 13 | | 1 | | | | | | | | | | | | | | | | | |
| Castle Eden, Hawthorn, Burdon, Cold Hesleden, Dalton-le-Dale..... | 2,556 | 3,010 | 96 | 1 | 4 | | | | 3 | 1 | | 1 | | 3 | | | | | | | | | | | | | | | |
| East Murton..... | 5,052 | 5,172 | 243 | | 11 | | | | 56 | | | 2 | | 2 | | | | | | | | 2 | | | | | | | |
| Kelloe..... | 976 | 906 | 43 | | 3 | | | | 3 | 6 | | | | | | | | | | | | | | | | | | | |
| Thornley..... | 2,070 | 2,862 | 116 | 1 | 2 | 1 | | | 2 | | | | | | | | 1 | | | | | | | | | | | | |
| Wingate..... | 4 463 | 4,885 | 269 | | 111 | 13 | 2 | 2 | 32 | 11 | | 1 | | 5 | | | | | | | 2 | | | | | | | | |
| Monk Hesleden, Hutton Henry, Sheraton, Hulam, Nesbit..... | 7,154 | 6 810 | 325 | | 109 | 8 | 1 | 3 | 80 | 18 | | | | 10 | | | | | | | 1 | | | | | | | | |
| Seaham, Seaton, Slingley .. | 4,998 | 6,635 | 198 | | 285 | | 3 | 8 | 112 | 17 | 1 | 5 | | 46 | | | | | | | 8 | 3 | | | | | | | |
| TOTALS..... | 36,782 | 41,099 | 1,673 | 6 | 587 | 24 | 9 | 14 | 332 | 78 | 1 | 10 | | 79 | | | 5 | 9 | | | 11 | 6 | | | | | | | |

Notification of Infectious Diseases Act has been in force since 4th April, 1893. The Easington Rural Sanitary District Infectious Hospital is situated at Easington.

